CLAIMS:

1. A device for lining a conduit to be rehabilitated, comprising a movable carriage having an axis, said carriage being adapted to enter and be displaced coaxially through the conduit, and a spray source rotatably mounted to said carriage for rotation about said axis, said spray source including a nozzle through which a fast setting lining mixture is forced out under pressure while said spray source is rotated about said axis and said carriage is axially displaced along the conduit, thereby providing for a uniform distribution of the lining mixture on an inner wall of the conduit, and wherein at least first and second fluid passages are provided for separately feeding first and second components of the fast setting lining mixture to the spray source where the first and second components are mixed together as the lining mixture is being applied.

2. A device as defined in claim 1, wherein said spray source includes a rotatable crank axle, said nozzle being mounted at a distal end of said crank axle for rotation about said axis.

3. A device as defined in claim 2, wherein said nozzle is in fluid flow communication with a mixing chamber in which the components of the lining mixture are mixed before being discharged at high speed through a slotted orifice defined in said nozzle at an angle with respect to a central axis of said mixing chamber.

4. A device as defined in claim 1, wherein said nozzle defines an inclined and outwardly flaring slotted spray orifice.

5. A device as defined in claim 2, wherein said nozzle is orientable to selectively spray radially inwardly and radially outwardly relative to said axis.

6. A device as defined in claim 2, wherein said rotatable crank axle includes a crank lever extending at right angles from said axis and a revolving arm extending from said crank lever in parallel to said axis.

7. A device as defined in claim 6, wherein said crank lever is an interchangeable component of variable length.

8. A device as defined in claim 6, wherein said revolving arm carries said nozzle, and wherein said revolving arm is pivotable about a longitudinal axis thereof relative to said crank lever for setting the orientation of said nozzle.

9. A device as defined in claim 6, wherein said spray source further includes a head carrying said nozzle, said head being displaceable by an actuator to selectively close or open said spray source, said actuator being arranged at right angles relative to said head to provide for a compact sprayer configuration.

10. A device as defined in claim 9, wherein said actuator is mounted to said revolving arm for reciprocating a drawer along said revolving arm, and

wherein said drawer is connected to said head to transfer the movement imparted thereto by said actuator to said head in a direction perpendicular to said revolving arm.

11. A device as defined in claim 10, wherein said drawer extends on each side of said head, said drawer defining a pair of inclined slots in which roller bearings extending laterally outwardly of said head are constrained to move.

12. A device as defined in claim 10, wherein said head defines a mixing chamber for separately receiving the components entering into the composition of the lining mixture to be sprayed, and wherein said head is movable along a state selection pin for respectively allowing or preventing access to said mixing chamber.

13. A device as defined in claim 12, wherein said head has a body defining a cavity for receiving an insert into which said mixing chamber is formed, said nozzle being seated on top of said insert and in fluid flow communication with said mixing chamber for receiving the lining mixture therefrom, and wherein a first nut is threadably engaged with said body for maintaining said insert in place, said nozzle being received in a recess defined in said first nut, and wherein a second nut is threadably engaged in said recess for maintaining said nozzle in place independently of said insert.

14. A device as defined in claim 9, wherein said actuator is a pneumatic cylinder extending along said revolving arm.

15. A device as defined in claim 1, wherein said spray source includes an arm extending in parallel to said axis and mounted for rotation thereabout, a head carrying said nozzle and displaceable by an actuator for selectively closing and opening said spray source, wherein said actuator extends along said arm, and wherein said head is displaceable in a direction perpendicular to said arm.

16. A device as defined in claim 1, wherein said carriage is equipped with a set of rollers for centering said carriage in the conduit to be rehabilitated.

17. A device as defined in claim 6, wherein a counterweight is provided at a free distal end of a lever mounted at right angles to the axis in a direction opposite to said crank lever.

18. A device as defined in claim 1, wherein said first and second fluid passages lead to a mixing chamber, and wherein a pressure loss regulator is provided adjacent said mixing chamber to ensure that the components of the lining mixture be supplied to the mixing chamber at substantially the same pressure.

19. A method for in-situ lining of a conduit to be rehabilitated comprising the steps of: inserting a spray source into a conduit to be rehabilitated, and forming a continuous liner on an inner wall of said conduit by spraying in a helical pattern at least a first layer of lining material on the inner wall while the spray source is coaxially displaced in the conduit and rotated about a central axis thereof, wherein said

lining material is a fast setting lining material having at least first and second components, and wherein said first and second components are separately fed to said spray source where said first and second components are mixed together as the fast setting lining material is being applied.

20. A method as defined in claim 19, wherein the lining material is sprayed such that each spire of sprayed lining material overlaps a preceding spire.

21. A method as defined in claim 19, further including the step of applying a second layer of lining material onto said first layer, said first and second layers having opposed helical developments.

22. A method as defined in claim 21, wherein the step of applying a second layer of lining material comprises the step of inverting the direction of rotation of the spray source.

23. A method as defined in claim 19, further comprising the steps of selecting the number of layers to be applied onto the inner wall of the conduit, and alternating the direction of rotation of the spray source between the application of each layer.

24. An atomizer for spraying a fast setting lining material on a surface, the atomizer comprising an elongated body, a head mounted at one end of said elongated body and defining a mixing chamber for separately receiving the components of the fast setting lining material from separate fluid passages, said head carrying a nozzle through which the fast setting lining material is forced out of the mixing

chamber, and a linear actuator extending along said elongated body for displacing said head in a direction perpendicular to said elongated body between a closed position, wherein the components of the fast setting lining material are prevented from reaching said mixing chamber, and an open position wherein the components of the fast setting material are free to flow into said mixing chamber.

25. An atomizer as defined in claim 24, wherein the actuator is mounted to said elongated body for reciprocating a drawer therealong, and wherein said drawer is connected to said head to transfer the movement imparted thereto by said actuator to said head in a direction perpendicular to said elongated body.

26. An atomizer as defined in claim 25, wherein said drawer extends on each side of said head, said drawer defining a pair of inclined slots in which roller bearings extending laterally outwardly of said head are constrained to move.

27. An atomizer as defined in claim 24, wherein said head moves up and down a needle valve extending at right angles from said elongated body.